constitutional feature of the species, but rather one dependent upon some peculiarity of position or structure of the individual polyp.

In his preliminary notice Krempf is unable to assign to the organs any definite function in the physiology of the polyps. He shows the close histological resemblance which they bear to the greatly thickened endoderm occurring in the deeper regions of the polyp, a resemblance to which allusion has already been made. To my mind the histological characters are such as to point to the tissue being mainly inactive. The small nuclei, meagre amount of protoplasm, and great vacuolization do not suggest a physiologically active tissue. This is the conclusion to which I have come with regard to the hypertrophied endoderm in the deeper regions of coral polyps generally, and I do not see that any other conclusion is to be reached with regard to the greatly thickened endoderm of the tentacular downgrowths. In the deeper regions of the polyps little or no growth is going on, mesenteries are absent, and the thickened tissue there probably serves to diminish the polypal cavity, so that the circulation of the internal nutritive fluid is more restricted to the upper regions, where growth is in actual progress. If we consider that the formation of the downgrowths is dependent upon mechanical influences, it is manifest that we need not necessarily assign to them any particular *rôle* in the economy of the polyp.

In correspondence with M. Krempf he informs me that he hopes to show later that the invaginations contain reserve food material and that they serve to nourish the young embryos. In this connexion it may be mentioned that none of the polyps of *Pocillopora* examined by me contained any sexual cells or embryos, and none of the staining reagents employed indicated the presence of reserve food material.

LXIV.—*Notes on the Genus* Tatera, *with Descriptions of new Species.* By R. C. Wroughton.

In studying a small collection of mammals from West Africa my attention was called to the genus *Tatera,* which I found to be represented in the British Museum Collection by a considerable number of specimens. On collating and comparing these I discovered that, though there were apparently a great number of quite easily distinguishable forms, the

literature provided a very limited number of specific names; and I was thus tempted to undertake a more careful and detailed study of the genus.

The general plan of coloration in the genus proved to be monotonously uniform so far as the body was concerned. The general features are, on the upperside, a ground-colour ranging from a buffy grey to bright fawn (the basal halves of the hairs invariably dark slate-colour), more or less mottled or grizzled with black (due to the dorsal hairs being tipped to a greater or less extent, numerically and quantitatively, with black); the underside and the hands and feet are white (the hairs being white to their bases). In the tail, however, I was able to find characters of coloration and proportion which have served me in making a first classification into groups. These groups, on the whole, can be allotted satisfactorily to definite geographical areas, thus:—

A. Tail dark above, pale below ..... Africa.
  a. Tail untufted or only slightly tufted.
    a^1. Tail untufted, appreciably longer than head and body. South of the Zambesi.
    b^1. Tail untufted, about equal in length to head and body. Between Zambesi and Equator.
    c^1. Tail slightly tufted, appreciably longer than head and body ..... North of Equator (except Nile Valley).
  b. Tail tufted ..... Nile Valley.
B. Tail dark above and below, with pale bands along the sides; tufted ..... Asia.

Note.—I have used the word "tufted" for want of a better, but it does not connote a "tassel," as in *Jaculus* for instance, but only that (*a*) the hairs of the terminal part of the tail are markedly lengthened, and (*b*) whatever the colour-plan of the rest of the tail, this terminal portion is completely black or dark brown.

Unfortunately c^1 in the above key is unsatisfactory. In the more northern forms the short dark tip of very slightly lengthened hairs is quite recognizable, but in forms such as *Kempi* from Nigeria and *mombasæ* the "slight tuft" is by no means strikingly apparent. In drawing up the detailed keys, therefore, having failed to find any other distinguishing character which would be satisfactory, I have been obliged to fall back entirely upon geographical distribution, and to arrange my key to the species as follows:—

Section I.—Africa South of the Zambesi.

A. Tail much ($\frac{1}{3}$) longer than head and body. (Umvolosi, Zululand.) ..... (1) *Ruddi*, sp. n.
B. Tail less markedly longer than head and body.
  a. Size larger; head and body 150 mm. or more.

a^1. Tail tipped with white.
a^2. Skull larger; basilar length 34 mm., breadth 23, upper molar series 6·5, bullæ 11. (Wakkerstroom.) .... (2) *draco*, sp. n.
b^2. Skull smaller; basilar length 30 mm., breadth 21, upper molar series 6, bullæ 10·5. (Orange Colony &c.) ..... (3) *Brantsi*, Smith.
b^1. No white tip to tail. (Cape Town.) (4) *afra*, Gray.
b. Size smaller; head and body less than 150 mm.
a^1. Head and body 135 mm. or more.
a^2. Upper surface of tail very dark. (Matabili.) ..... (5) *Lobengulæ*, de Wint.
b^2. Upper surface of tail less dark; ground-colour of body very pale. (Molopo.) ..... (6) *L. bechuanæ*, subsp. n.
c^2. Upper surface of tail scarcely darker than lower. (Kuruman.) (7) *L. griquæ*, subsp. n.
d^2. Ground-colour of body very dark, from chestnut to almost black. (Mazoe.) ..... (8) *L. mashonæ*, subsp. n.
b^1. Head and body less than 135 mm.
a^2. Marked rufous tinge on chest; dark upper surface of tail narrowing distally (rarely disappearing and leaving a white tip). (Deelfontein, C. C.) ..... (9) *miliaria*, sp. n.
b^2. No rufous tinge on chest; dark upper surface of tail broad and well marked to the tip. (Kuruman.) ..... (10) *m. stellæ*, subsp. n.
c^2. No rufous tinge on chest; dark upper surface of tail narrowing, but also darkening. (Zoutpansberg.) ..... (11) *m. salsa*, subsp. n.
C. Tail equal in length to head and body. (Salisbury.) ..... (12) *panja*, sp. n.

Section II.—Africa North of the Zambesi.

A. Tail not appreciably longer than head and body.
a. Large; length of head and body 160 mm. or more.
a^1. Rather larger; tail proportionately shorter; skull larger; upper molar series 6·8 mm. (Mweru, B. C. A.) (13) *liodon*, Thos.
b^1. Rather smaller; tail about equal in length to head and body; skull smaller; upper molar series 6·5 mm. (Angola &c.) ..... (14) *valida*, Boc.
b. Medium; length of head and body 140 mm. or more.
a^1. Upper molar series 5·3 mm. (Angola.) (15) *angolæ*, sp. n.
b^1. Upper molar series 6 mm.
a^2. Hind foot 30 mm., bullæ 10·5. (Gold Coast.) ..... (16) *Giffardi*, sp. n.

b^2. Hind foot 32 mm., bullæ less than 10 mm.
a^3. Brightly coloured. (Lake Nyasa, B. C. A.) .... (17) *nyasæ*, sp. n.
b^3. Soberly coloured, nigrescent. (Upper Shire, B. C. A.)..... (18) *n. shirensis*, subsp. n.
c. Small; head and body less than 140 mm.; colour almost black. (Uganda.) .... (19) *nigrita*, sp. n.

B. Tail appreciably longer than head and body.
a. Tail not or only slightly tufted.
a^1. Large; head and body 160 mm. (Uganda.)..... (20) *fallax*, Thos. & Schw.
b^1. Medium; head and body 140 mm. or more.
a^2. Teeth 6·3 mm., bullæ 11·5. (Galla Country.)..... (21) *shoana*, sp. n.
b^2. Teeth 6 mm., bullæ 11. (Nigeria) (22) *Kempi*, Wr.
c^1. Small; head and body 100 mm or more.
a^2. Hind foot 32 mm. (Somali.).... (23) *Phillipsi*, de Wint.
b^2. Hind foot 36 mm. (B. E. A.).... (24) *mombasæ*, sp. n.
d^1. Very small; head and body less than 100 mm. (Gambia.)..... (25) *gracilis*, Thos.
b. Tail tufted. (Nile Valley, &c.)
a^1. Sole of hind foot naked. (Nile Valley.) ..... (26) *robusta*, Cretz.
b^1. Band of hair across sole of foot. (Wadelai.) ..... (27) *Emini*, Thos.

Section III.—Asia.

A. Size large (175 mm.).
a. Mottled with black; hind foot 42 mm., upper molar series 7. (Syria.)..... (28) *tæniura*, Wagn.
b. Uniform colour; hind foot 41 mm., upper molar series 6·3. (E. Persia.) ..... (29) *persica*, sp. n.
c. Mottled black; hind foot 39 mm., upper molars 6. (C. Persia.) ..... (30) *p. scansa*, subsp. n.
d. Uniform colour; hind foot 38 mm., upper molars 5·5. (U. P. India.).... (31) *indica*, Hardw.

B. Size smaller.
a. Tail (200 mm.) and hind foot (45 mm.) very long. (S. India.) ..... (32) *Cuvieri*, Waterh.
b. Tail normal.
a^2. Hind foot 41 mm., skull breadth 23, molars 6·5. (S.W. Persia.) ..... (33) *Bailwardi*, sp. n.
b^2. Hind foot 39 mm., skull breadth 25, molars 6·5. (S.W. Persia) ..... (34) *B. monticola*, subsp. n.
c^2. Hind foot 41 mm., skull breadth 22, molars 6. (Ceylon.) ..... (35) *ceylonica*, sp. n.

Section I.—Africa South of the Zambesi.

The fauna of this area is specially well represented in the Museum Collection, thanks to the numerous series from

various localities collected by C. H. B. Grant and presented to the Museum by Mr Rudd. With the exception of *panja* all the forms present a proportion in which the tail is appreciably longer than the head and body. Nevertheless all the old descriptions of species (by Gray, Smith, Smuts, Wagner, Sundevall, &c.) state the exact reverse. This, no doubt, is due to the fact that all these descriptions were based on mounted specimens, and measurements were taken following the curves of the body, thus greatly exaggerating them.

Tatera panja is obviously a "stray" from the mid-African fauna, but as my "Sections" are wholly geographical, I have included it among the South-African species.

(1) *Tatera Ruddi*, sp. n.

4. 12. 3. 55–59. Umvolosi, Zululand. Alt. 211′. (Rudd Exploration.)

The same size as *fallax*, Thos., from E. Africa, with an almost equally long tail.

Colour above as in *fallax*, but with much less admixture of black. The pale areas at the bases of the ears as in *fallax*, but that over the eye and extending backward to the ear in *fallax* is wanting in this species. The hairs on the nose and forehead have a metallic lustre. Under surface white, but markedly tinged with rufous, especially the sides of the throat and armpits. Tail pale sandy and but slightly darker above near its base, with no appreciable line of demarcation between the upper and under surfaces; the tip for about 40 mm. whitish, the hairs on this whitish portion rather longer than on the rest of the tail, but in no way amounting to a tuft or pencil as in the species of the north.

Skull very markedly smaller than in *fallax*, especially the incisors.

Normal dimensions as follows:—

Head and body 160 mm.; tail 205; hind foot 40; ear 23.

Skull: greatest length 41; basilar length 33; zygomatic breadth 21; length of upper molar series 6·5; bullæ 10·5.

The following are measurements of some selected specimens:—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
4.12.3.56. ♂.	Old	164	203	40	25	..	..	..	6·5	..
(Type) 4.12.3.57. ♀.	Old	157	205	40	23	40	32·5	21	6·5	10·5
4.12.3.58. ♀.	Old	157	208	40	23	41	33	21·5	6·5	10·5

Hab. Umvolosi, Zululand.

Type. B.M. no. 4.12.3.57. An old female. Collected by Mr. Grant on the 11th July, 1904 and presented to the Museum by Mr. Rudd.

Besides the differences noted above, strongly grooved upper incisors separate this species from *fallax*, Thos. & Schw.

I have much pleasure in naming this fine well-marked species after Mr. C. D. Rudd, to whose generosity we owe the fine collections made by Mr. Grant in S. Africa, which alone have made possible any useful investigation of this and other S.-African groups.

(2) *Tatera draco*, sp. n.

4.9.1.39–42. Wakkerstroom, Transvaal. (Rudd Exploration.) Alt. 6000′.

A form very near *Brantsi*, but consistently larger all round. The dark upperside of the tail dies out distally and leaves a white tip, but not to the same extent as in *Brantsi*. There is a much greater admixture of black on the back and the white underside is strongly tinged with rufous on the median line, across the chest, and on the lower surface of the tail; in this last it resembles *Ruddi*. The normal measurements are:—

Head and body 160 mm.; tail 175; hind foot 36; ear 22.

Skull: greatest length 42; basilar length 34; zygomatic breadth 23; length of upper molar series 6·5; length of bullæ 11.

Its greater size and the rufous tinge of the under surface distinguish this species from *Brantsi*, while its shorter hind foot and tail differentiate it from *Ruddi*, its near neighbour on the other side.

I have named it *draco* from its habitat on the Drakensberg.

The following are actual measurements of selected specimens:—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
4.9.1.39.	♂. Young	95	113	31	19	31	24	18	6·1	9
4.9.1.41.	♂. Adult.....	146	157	35	22	40	31	21	6·5	11
(Type) 4.9.1.42.	♀. Old.....	162	176	36	22	42	34	23	6·5	11

Hab. Wakkerstroom, Transvaal.

Type. B.M. no. 4.9.1.42. An old female. Collected by Mr. Grant on the 14th March, 1904, and presented to the Museum by Mr. Rudd.

(3) *Tatera Brantsi.*

Gerbillus Brantsi, Smith, Rep. Exp. Int. S. Afr. p. 43 (1836).
Gerbillus montanus, Smith, Ill. Zool. S. Afr., Mamm. pl. xxxvi. fig. 1 (1842).
Meriones (*Rhombomys*) *maccalinus*, Sundevall, Œfv. Vet.-Ak. Stockh. p. 120 (1846).

43. 2. 28. 14 (skull 59. 5. 7. 5). "Bashartoo" Country (? Basutoland). Type of *montanus*.
2. 4. 3. 3. Bethlehem, O. R. C. Alt. 5000′.
98. 4. 4. 14–19. Krugersdorp.
4. 1. 6. 2–3. Abraham's Kraal, O. R. C.
4. 4. 2. 6–8 (skull 4. 3. 1. 75). Vredefort Road, O. R. C. (*Barrett-Hamilton*). Alt. 4893′.
1171, 1196. Klein Letaba. Alt. 1100′. } Zoutpansberg. (Rudd Exploration.)
1305. Woodbush. Alt. 4700′. }

The type of *Brantsi* is lost, but that of *montanus* is still available. It is much faded and the tail is shrivelled out of all recognition, but the skull, though broken and wanting the bullæ, is quite good for comparison. It is a shorter, stouter skull than that of *afra*, with broader, stouter molars and wider incisors, as pointed out by Smith in his description. Smith's earlier description of *Brantsi* is very meagre, but as the locality is the crest of the Drakensberg, though slightly further north than the home of *montanus*, they may, in view of Smith's well-known habit of changing the names of his species at will, be legitimately accepted as the same species.

The specimen from Bethlehem corresponds well in skull-characters, as does the skull from Vredefort. The skulls of the skins from Vredefort are missing, but the skins themselves agree well with the Bethlehem specimen in coloration. Sundevall's *maccalinus* puzzled me a good deal; but by the courtesy of Dr. Lönnberg, Curator of the Stockholm Museum, I have been able to examine the specimen which undoubtedly served as Sundevall's type, for it is the only one in the museum from the Magaliesberg. It is labelled *montanus*, Smith, though close examination shows that this name has been written over "n. sp.," and the skull is still labelled "n. sp." This skull agrees excellently with the type skull of *montanus*. The exact coloration of the specimen, as in the case of the *montanus* type, is not recognizable owing to age and grime.

This species, then, which I accept as *Brantsi*, Sm., may be described as about the same size as *afra*, with a rather

warmer ground-colour; the dark colour of the upper surface of the tail dies away rapidly, leaving the distal half pure white, or, at most, persists as a very narrow dark line to near the tip. The skull, as stated above, is shorter and stouter, the upper molar series broader and the incisors wider than in *afra*. The following may be taken as the normal measurements of *Brantsi*:—

Head and body 150 mm.; tail 165; hind foot 36; ear 20.

Skull: greatest length 38; basilar length 30; zygomatic breadth 21; length of upper molar series 6; bullæ 10·5.

I place the three specimens from Zoutpansberg here with great hesitation. In coloration they closely resemble *miliaria salsa* from the same locality, except that there are indications of a white tip to the tail. In size and skull-characters, however, there is no resemblance. 1196 is slightly older than the other two and is consistently larger in all details of body and skull. Except in having a narrower upper molar series, 1171 and 1305 approach closely in skull-characters to *Brantsi*, but they all have much longer tails than any other S.-African species except *Ruddi*; there is also an indication of white towards the end of the tail, which also recalls that species. With so little and such conflicting material I cannot venture to give this form a new specific name, and have decided to rank these specimens as *Brantsi* until more material is available.

(4) *Tatera afra*.

Gerbillus afra, Gray, Spicil. Zool. p. 10 (1828).
Meriones Schlegeli, Smuts, Enum. Mamm. Cap. p. 41 (1832).

3 7.2.15–17. D'Urban Road, near Cape Town. (Rudd Exploration.)

Gray's type is not available and his description is very short and vague. That his type was a specimen of the *Tatera* found about Cape Town is certain, and the Museum specimens quoted above may therefore be confidently accepted as *afra*. The following may be taken as normal dimensions of *afra*:—

Head and body 160 mm.; tail 175; hind foot 34; ear 24.

Skull: greatest length 41; basilar length 32; zygomatic breadth 21; length of upper molar series 6·3; bullæ 10·5.

This is a dull-coloured species compared with the more northern forms, and the skull is more slender in all details than that of other forms of its own size, having narrower teeth (both incisors and molars) and smaller bullæ.

Smuts's *Schlegeli* has been unanimously accepted as a synonym of *afra* since Cuvier ranked it as such in 1836;

but I confess the question has given me much trouble. Smuts's figure shows an animal coloured like *afra*, with the terminal half of the tail white, as in *Brantsi*, Smith; but though the description is very long and minutely detailed, there is no mention of this striking character. The skull-figures seem to me to indicate on the whole *Brantsi*, though in very many ways they agree with *afra*. It is scarcely to be thought that a coast form at Port Elizabeth would correspond with a high mountain form such as *Brantsi* rather than with *afra*, the coast form of the Cape. It must also be remembered that *Ruddi* from Umvolosi, Zululand, another coast form, has also a partially white tail, though the proportion of white is much less than in *Brantsi*. In my opinion it is practically certain that the characters of several specimens from different localities went to the formation of *Schlegeli*. I have no specimens from the Port Elizabeth region to refer to, but it is quite probable that a form with white tail and stout teeth may be found there, in which case the name *Schlegelii* will be available for it; but meanwhile I do not venture on the evidence available to move the name from its accepted position of a synonym to *afra*.

(5) *Tatera Lobengulæ*.

Gerbillus (*Tatera*) *Lobenguiæ*, de Winton, Ann. & Mag. Nat. Hist. vol. ii. p. 4 (1898).

97. 1. 4. 11–16. Essex Vale, Matabililand (*Selous*).

The average dimensions of this species may be taken as:—

Head and body 135 mm.; tail 160; hind foot 34; ear 23 (de Winton's "45" was a slip of the pen).

Skull: greatest length 49; basilar length 30; zygomatic breadth 20; length of upper molar series 6; bullæ 10·5.

(6) *Tatera Lobengulæ bechuanæ*, subsp. n.

4. 10. 1. 64–71. Molopo, Bechuanaland (*Woosnam*).

The size is much as in typical *Lobengulæ*, the ground-colour is paler, and there is less grizzling, with the general result of a much paler animal; the very dark upper surface of the tail found in *Lobengulæ* is much less noticeable in this form. The skull is stouter than in typical *Lobengulæ*, with larger bullæ. The following are dimensions of some specimens:—

					Skull.				
	H & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
4. 10. 1. 64	136	151	31·75	23·5	39·5	30	20	5·8	11
(Type) 4. 10. 1. 69	137	163	34	22·5	40	31	20	6	11
4. 10. 1. 70	145	160	34	23	40	31	20	6	11

Hab. Molopo, Bechuanaland.

Type. B.M. no. 4. 10. 1. 69. An old female. Collected by Mr. Woosnam on the 12th July, 1904.

(7) *Tatera Lobengulæ griquæ*, subsp. n.

4. 4. 8. 7–9. Kuruman (*Dent*). Alt. 4000′.

4. 10. 1. 22. Kuruman (*Woosnam*).

A still stouter form than *bechuanæ*, more approaching to typical *Lobengulæ* in colour, but with the dark grizzling on the upper surface of the tail completely absent, the tail rather longer in proportion to head and body than in the other forms, bullæ markedly larger.

The following are measurements of four specimens (the body-measurements as recorded by collector) :—

	H. & b.	Tl.	H. f.	Ear.	Skull. G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
4. 4. 8. 7	139	153	33·5	25·75	40	31	21	6	11·5
4. 4. 8. 8	131	139·25	32	22	40	30	21	6	11·5
4. 4. 8. 9	136	174	36	24·75	40	?	21	6	11·5
(Type) 4. 10. 1. 22 ..	143	166	34	23	40	31	21	6	11·5

Hab. Kuruman, Bechuanaland.

Type. B.M. no. 4. 10. 1. 22. A very old female. Collected by Mr. Woosnam on 23rd April, 1904.

(8) *Tatera Lobengulæ mashonæ*, subsp. n.

95. 11. 3. 6–10 ; 4. 12. 1. 11–13 ; 95. 11. 3. 11. Mazoe, Mashonaland (*Darling*). Alt. 4000′.

This northern race is very much darker than any of the others, the ground-colour being deeper and the grizzling with black very much greater, and there is much more individual variation. The size is much the same as in typical *Lobengulæ*. The skull-characters show considerable individual variation, but on the whole are as in *Lobengulæ*.

By the courtesy and kindness of Dr. Lönnberg I have been able to examine a specimen from Mopani, *i. e.* the hilly country near the Limpopo about halfway between Molopo and Matabili. In skull-characters this specimen agrees closely with typical *Lobengulæ*, but in coloration it approaches the *mashonæ* form by its richer fulvous ground-colour; it is not, however, grizzled with black as in that form.

The following are measurements of some selected specimens (the body-measurements are as recorded by the collector,

but do not seem to have been taken quite as usual ; the true length of head and body is about 140–145 mm.) :—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
(Type)	95. 11. 3. 10	156	160	32	23	39	31	21	5·8	10·5
	4. 12. 1. 13	136	169	33	22	39	30	21	6	10
	95. 11. 3. 11	148	158	33	22	41	31	21	5·8	10·5

Hab. Mazoe, Mashonaland.

Type. B.M. no. 95. 11. 3. 10. An old female. Collected by Mr. Darling on the 13th August, 1895, and presented to the Museum.

(9) *Tatera miliaria*, sp. n.

1. 7. 9. 27 ; 3. 1. 4. 29–37. Deelfontein, C. C. (*Sloggett*).

There is a small form of *Tatera* found in the centre and west of the O. R. C. and Transvaal from Deelfontein to Zoutpansberg which is clearly distinct from the larger forms, such as *afra*, *Brantsi*, and even *Lobengulæ*, side by side with which it is found living. The specimens we have from Deelfontein, on the south border of the O. R. C., are very uniform in coloration and skull-characters. The ground-colour above is the usual sandy buff, more or less clouded with buff, while the underparts and the inner sides of the limbs are pure white ; the underside of the tail, however, is not pure white as in *Brantsi*, but rather a pale buff. In *miliaria* there is but little darkening of the upperside of the tail, and there is a patch distinctly tinged with rufous on the chest. The normal dimensions may be taken as :—

Head and body 125 mm. ; tail 145 ; hind foot 30 ; ear 22.

Skull : greatest length 38 ; basilar length 28 ; zygomatic breadth 20 ; molars 5·5 ; bullæ 10.

The following are actual dimensions of some selected specimens (the body-measurements are quoted from the labels) :—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
(Type)	3. 1. 4. 29. V. old	127	135	30	22	38	30	20	5·5	10
	3. 1. 4. 35. Adult	124	163	31	21	36	28	18	5·5	10
	3. 1. 4. 36. Adult	124	140	28	22	37	28	20	5·5	10

Hab. Deelfontein, Cape Colony.

Type. 3. 1. 4. 29. A very old male. Collected by Mr. Grant on the 2nd September, 1902, and presented to the Museum by Col. Sloggett.

(10) *Tatera miliaria stellæ*, subsp. n.

4. 10. 1. 18, 19, 20, 23. Kuruman, Bechuanaland (*Dent*). Alt. 4000′.

Slightly smaller than typical *miliaria*, with a shorter skull. There is no sign of rufous on the chest, and the upper surface of tail is very dark to the tip.

The following are measurements of some selected specimens :—

							Skull.				
			H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
(Type)	4. 10. 1. 19.	Adult	123	140	32	21	36	27	? 19	5·5	10
	4. 10. 1. 20.	Adult	115	130	30	22	35	27	18	5·5	10
	4. 10. 1. 23.	Adult	115	127	30	19	34	26	19	5·5	10

Hab. Kuruman, Bechuanaland.

Type. B.M. no. 4. 10. 1. 19. An adult male. Collected by Mr. Dent on the 30th April, 1904.

(11) *Tatera miliaria salsa*, subsp. n.

1164, 1172, 1175, 1176, 1188, 1211. Woodbush, Zoutpansberg. (Rudd Exploration.) Alt. 4700′.

5. 12. 9. 74–76. Klein Letaba, Zoutpansberg. (Rudd Exploration.) Alt. 1100′.

This form is about as much larger as the last is smaller than typical *miliaria*. The upper surface of the tail, though not so dark as in *stellæ*, is markedly darker than in typical *miliaria*, and is especially dark at the extreme tip, where even the underside is darkened.

The following are measurements of some selected specimens :—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
	1175	122	146	30	19	37	28	19	5·5	10
	1211	124	139	29	19	38	28	20	5·5	9·8
(Type)	5. 12. 9. 76	130	153	30	21	38	29	19	5·5	10

Hab. Klein Letaba, Zoutpansberg.

Type. B.M. no. 5. 12. 9 76. Female. Collected by Mr. Grant on the 6th September, 1905, and presented to the Museum by Mr. Rudd.

We have three skins and seven skulls collected by Major Barrett-Hamilton at Vredefort Road, O. R. C. The three skins and one of the skulls are undoubtedly *Brantsi*. Four of the remaining skulls belong to a small form of

Tatera, and are very like skulls of the Kuruman form; but whether that form extends to Vredefort or whether there is a distinct form found there it is impossible in the absence of skins to decide. As there is no geographical break in the distribution of *miliaria* and its closely allied forms, I have ranked them as subspecifically allied; but amongst these Vredefort skulls one has narrow slight molars resembling those of the Kuruman form, while three more have broad coarse molars, resembling those of typical *miliaria* from Deelfontein; so that it is possible that with more material two or more distinct species will have to be formed.

(12) *Tatera panja*.

Meriones tenuis, Peters (nec Smith), Reis. Mossamb. p. 149 (1852).

99. 8. 3. 7–10. Chicosta, 60 miles above Tete, Zambesi River.

The ground-colour above is a bright sandy with but little black shading, which is chiefly confined to the back, at the base of the tail. The under surface is, as usual in the genus, a bright white. The under surface of the tail, however, is scarcely paler than the upper, except at the extreme point, where the upper surface is very dark.

The following may be accepted as normal measurements of this species:—

Head and body 130 mm.; tail 135; hind foot 32; ear 20.

Skull: greatest length 35; basilar length 28; zygomatic breadth 19; length of upper molar series 5·5; bullæ 10.

Hab. Chicosta, south bank of Zambesi above Tete.

Type. B.M. no. 99. 8. 3. 9. An adult male. Taken by Capt. Boyd Alexander and presented to the Museum. Four specimens.

This form was taken on the right bank of the Zambesi, but I think the proportionally short tail at once clearly marks its affinity to the Nyasan forms, and I have little doubt that it is conspecific with the specimens brought by Peters from the neighbourhood of Tete, and identified by him as *G. tenuis*, Sm. I have borrowed the vernacular name of this Tete form, as recorded by Peters, for this species.

Section II.—Africa North of the Zambesi.

This section includes all the remaining *Tateras* with bicoloured tails, viz. (*a*) those, from the area between the Zambesi and the Equator, constantly characterized by the

equal length of the head and body and the tail, which latter is not or only "slightly tufted"; (*b*) those, from Africa north of the Equator (except the Nile Valley), characterized by long slightly tufted tails, the slight tuft, however, being often not very obvious; and, finally, (*c*) those, from the Nile Valley, remarkable for their tufted tails.

Noack (Zool. Jahrb. vol. ii. p. 211) in 1888 described a *Tatera* from the west shore of Tanganyika remarkable for having two shallow grooves on the upper incisors in place of the normal one. In 1897 the Museum received specimens from the Tanganyika Plateau exactly corresponding with Noack's description, and showing that his *Boehmi* was a constant form, and Mr. Thomas (P. Z. S. p. 433, 1897) created for it the genus *Gerbilliscus*. Later a *Tatera* was received also from mid-Africa in which even these two shallow grooves were wanting, and was provisionally placed in the same genus under the name of *fraterculus*.

The material at present is too meagre for any profitable discussion as to the validity of the position given to these two forms, and I have therefore excluded them from my key. I would call attention, however, to the fact that *Boehmi* has a markedly long tail, whereas that of *fraterculus* is about equal to the head and body; so that while *Boehmi* shows apparent affinity to *fallax* and the northern forms, though living in mid-Africa, *fraterculus* is in close agreement with the forms of *Tatera* which surround it.

(13) *Tatera liodon*.

Tatera liodon, Thos. Ann. & Mag. Nat. Hist. ix. p. 441 (1902).

I quote dimensions from Mr. Thomas's description:—

Head and body 177 mm.; tail 142; hind foot 35; ear 20.

Skull: (greatest length 45; basilar length 35;) zygomatic breadth 22; length of upper molar series 6·8; bullæ 11.

The body-measurements were not recorded by the collector, and I cannot think that in life the proportion of head and body to tail, as recorded by Mr. Thomas from skin-specimens, really exists; *liodon* is but little larger than *valida* (*e. g.* head and body 160 mm.), but the tail, though undoubtedly unusually short, is almost certainly more than 140 mm., and I suspect is about the same length as the head and body.

Noteworthy characters are large size, short tail, and indistinct grooving of incisors.

(14) *Tatera valida.*

Gerbillus validus, Boc. J. Sc. Math. Phys. Nat. Lisb. pt. v. p. 6 (1890).

92. 1. 9. 10. Caconda, Angola. Cotype in al. (Lisb. Mus.).

4. 4. 9. 46–47. Duque de Bragança, Angola (*Ansorge*).

87. 12. 1. 48–49. Monbuttu (*Emin Pasha*).

Bocage based his species *valida* not on one but on several specimens from different localities. His description gives the body-measurements of an individual from the Rio Cuando and the skull-dimensions of one from Caconda. He states that the tail is always shorter than the head and body, but this must be due to his method of measurement. The cotype and Dr. Ansorge's specimens show that, as the dimensions are now taken, the head and body and the tail are practically equal in length. These Bragança specimens, while agreeing in all main characters with the cotype and Bocage's description, differ a little in being much less "rembrunies" and having the skull somewhat longer and narrower and the bullæ somewhat smaller; but the coarse broad molars and the stout, scarcely grooved upper incisors prove them to belong undoubtedly to this species. I venture to record the normal dimensions of this species as:—

Head and body 160 mm.; tail 160; hind foot 36; ear 20.

Skull: greatest length 41; basilar length 34; zygomatic breadth 22; length of upper molar series 6·5; bullæ 11.

Emin Pasha's specimens from Monbuttu I have placed here provisionally. In coloration they agree with *valida* even better than the Angola specimens, but seem to be smaller, and the skull is even shorter and broader than in the "cotype" of *valida*.

(15) *Tatera angolæ*, sp. n.

5. 5. 9. 34–39. Fort Quilenges, Angola (*Ansorge*). Alt. 3100′.

4. 4. 9. 48. Pungo Adongo, Angola (*Ansorge*). Alt. 1200′.

92. 1. 9. 11. Rio Coroca, Angola (Lisbon Museum, in al.).

A much smaller species than its compatriot *valida*. Ground-colour above a sandy buff, grizzled with black; under surface pure white; tail above same colour as back, below dirty white. Normal dimensions:—

Head and body 145 mm.; tail 150; hind foot 31; ear 20.

Skull: greatest length 36; basilar length 27; zygomatic breadth 20; length of upper molar series 5·3; bullæ 10.

The following are some actual measurements (those of the body from the labels) :—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G.l.	B.l.	Zyg. b.	Mol.	Bullæ.
	92.9.1.11	111	153	31	17	36	27	20	5·3	10
(Type)	5.5.9.34. Y. adult	144	137	30	19	35	27	19	5·3	10
	5.5.9.36. Y. old	145	156	32	21	38	30	20	5·5	10
	4.4.9.48. Old	144	144	33	24	39	30	20	5·3	10·3

It is possible that the last two specimens (with no. 5.5.9.35) represent a distinct form ; but since two of them were taken at the same time and place as the type, from which they differ in no way externally, and that all three are very much older than the type of *angolæ*, I have not ventured to separate them. *Tatera angolæ* most likely represents the form referred to by Bocage in his memoir on "Mammifères d'Angola et du Congo," published in 1890 in Jorn. Sc. Math. Phys. Nat. Lisb. (pp. 3 *et seq.*). It seems to me probable that he too had before him specimens of two forms differing in nothing but size, and even that only slightly, for while the specimen presented to the British Museum agrees closely with typical *angolæ*, his published description seems to apply better to the Pungo Adongo specimen above (and nos. 35 and 36 from Quilenges).

Hab. Fort Quilenges, Angola.

Type. B.M. no. 5.5.9.34. A young adult male. Collected by Dr. Ansorge on the 11th January, 1905.

(16) *Tatera Giffardi*, sp. n.

99.6.15.17. Gambaga, Gold Coast (*W. Giffard*). Alt. 1300′.

A rather small *Tatera* with very sobre colouring. The ground-colour is a buff rather than the usual "fawn."

The dimensions (those of the body recorded by collector) are :—

Head and body 140 mm. ; tail 155 ; hind foot 30 ; ear 22.

Skull : greatest length 37 ; basilar length 28 ; zygomatic breadth 19 ; length of upper molar series 6 ; bullæ 10·5.

Hab. Gambaga, Gold Coast.

Type. B.M. no. 99.6.15.17. An adult male. Collected by Capt. Giffard on 4th January, 1899, and presented to the Museum.

Its smaller size and markedly smaller skull distinguish this species at once from *kempi* ; while from *angolæ*, which it closely approaches in size, it is separated by its longer tail, much larger, broader molars, and larger bullæ.

(17) *Tatera nyasæ*, sp. n.

5. 2. 2. 10–13. Deep Bay, Lake Nyasa, B. C. A. (*Sir H. Johnston*).

97. 10. 1. 87–92. Fort Hill, Nyasa, B. C. A. (*Sir H. Johnston*).

97. 10. 1. 96–99. Karonga, Nyasa, B. C. A. (*Sir H. Johnston*).

3. 4. 2. 7–8. Luangwa, Nyasa, B. C. A. (*Sir H. Johnston*).

There would seem to be two forms among these specimens —the one I have chosen to represent the type, with a lighter narrower skull and small bullæ, and the other (including the Fort Hill (?) and Luangwa specimens) with a coarser broader skull and large bullæ. I have only fragments of skulls of the Fort Hill specimens and only a broken one of a very old individual from Luangwa, and under the circumstances do not venture to differentiate them.

Tatera nyasæ in body-measurements differs but little from *shirensis*, but the black shading of this latter species is almost absent in *nyasæ*, which also has a much brighter tone of "sandy" as a ground-colour.

The dimensions are (body-measurements are given approximately) :—

Head and body 150 mm.; tail 150; hind foot 32; ear 20.

Skull: greatest length 37; basilar length 29; zygomatic breadth 18; length of upper molar series 6; bullæ 9·5.

Hab. Deep Bay, Nyasa, B. C. A. Alt. 7500′.

Type. B.M. no. 5. 2. 2. 10. An adult male. Collected by Mr. Whyte in April 1903, and presented to the Museum by Sir H. Johnston.

(18) *Tatera nyasæ shirensis*, subsp. n.

97. 10. 1. 100–103. Mt. Malosa (*Sir H. Johnston*). Alt. 5300–6300′.

93. 5. 2. 13–14. Fort Johnston, Upper Shire (*Sir H. Johnston*).

The whole of the material from Nyasaland is unfortunately in poor condition; dimensions were not recorded by the collector, and the skulls are much broken. The two specimens from Upper Shire are indistinguishable from the series from Mt. Malosa externally, but the skulls of the former are markedly broader, stouter, and have larger bullæ. With the material available I do not venture to separate them even as subspecies. There are, however, from Nyasa two well-marked

colour-forms, which, so far as the material available is concerned, are perfectly constant geographically. The present form, representing the fauna south of Lake Nyasa, is a medium-sized animal, in which the ground-colour is rather of a brown-sandy colour and in which the black shading is so copious as to give it a very markedly dark and sober appearance.

The dimensions are (approximately for body-measurements) :—

Head and body 150 mm.; tail 150; hind foot 32; ear 19.

Skull: greatest length 37; basilar length 29; zygomatic breadth 18; length of upper molar series 6; bullæ 10.

Hab. Mount Malosa, Upper Shire, B. C. A.

Type. B.M. no. 97. 10. 1. 100. An adult male. Collected by Mr. Whyte 27th November, 1896, and presented to the Museum by Sir H. Johnston.

(19) *Tatera nigrita*, sp. n.

2. 11. 1. 12. Masindi, Unyoro, Uganda (*Ansorge*).

2. 7. 5. 7–9. R. Kafu, Uganda (*Cunningham*).

96. 5. 29. 5. Mumia, Kavirondo (*Ansorge*).

A small species about the size of *angolæ*.

Ground-colour a dark rufous buff, very much washed with black, especially along the centre of the back and upper surface of the tail. In some specimens this darkening is so complete as to make them look almost black. Under surface white as usual, but lower surface of the tail buff and not clear white. The molars are stout and broad and the bullæ large for the size of the skull, and the grooves of the incisors but slightly marked in old specimens.

The dimensions are as follows :—

Head and body 135 mm.; tail 110; hind foot 32; ear 20.

Skull: greatest length 38; basilar length 30; zygomatic breadth 20; length of upper molar series 6; bullæ 11.

Hab. Masindi, Unyoro, B. E. A.

Type. B.M. no. 2. 11. 1. 12. An adult female. Collected by Dr. Ansorge on the 4th August, 1897.

Its dark colour, smaller size, and large bullæ distinguish it at once from the Nyasan forms.

(20) *Tatera fallax*.

Tatera fallax, Thos. & Schw. P. Z. S. i. p. 461 (1904).

4. 2. 6. 11–13. Burumba, Uganda (*Radcliffe*). Alt. 5000′.

I quote the dimensions from the published description :—

Head and body 160 mm.; tail 219; hind foot 43; ear 24.

Skull: greatest length 45; (basilar length 35;) zygomatic breadth 24; length of upper molar series 7; bullæ 12.

Noteworthy characters in this species are large size, very long tail, and indistinct grooving of incisors.

(21) *Tatera shoana*, sp. n.

98.6.9.8–9. Jefir Medir and Ujawaji, Somaliland (*Hawker and Chetham*). Alt. 5000′.

2.9.9.18. Lake Zuai, Abyssinia (*Degen*).

79.11.11.4–5. Galla Country (*Gerrard*).

Much larger than *Phillipsi*, ground-colour duller than in that species. Mr. de Winton records "no ear- or eye-patches" in *Phillipsi*: this is not quite correct; though not strongly marked, there are distinct pale areas between the eye and ear and behind the ears at their bases, and this is equally true of this species. The terminal third of the tail is clothed above with long black hairs, recalling the tufted tails of the forms of the Nile Valley; but it is not so marked, nor does the black coloration extend to the lower surface as in those forms.

The following are dimensions:—

Head and body 140 mm.; tail 180; hind foot 36; ear 20.

Skull: greatest length 41; basilar length 32; zygomatic breadth 21; length of upper molar series 6·3; bullæ 11·5.

Hab. Jefir Medir, Somaliland.

Type. B.M. no. 98.6.9.8. An old female. Collected by Messrs. Hawker and Chetham, 31st December, 1897 (two specimens), and presented to the Museum.

The long black hairs at the tip of the tail almost forming a tuft distinguish this from all other forms yet known except those from the Nile Valley.

(22) *Tatera Kempi*.

Tatera Kempi, Wroughton, Ann. & Mag. Nat. Hist., April 1906, p. 375.

5.12.1.8. Anambra Creek, S. Nigeria (*R. Kemp*).

A medium-sized *Tatera* with an extraordinarily long tail. The colouring is rather dull, the ground-colour being a very brown shade of the usual "fawn" or "sandy"; otherwise there is no noteworthy external character. The skull is large for so small an animal, and in shape is markedly long and narrow; the groove of the incisors is well marked and is more than ordinarily outside the median line.

The dimensions are (those of the body recorded by the collector):—

Head and body 145 mm.; tail 174; hind foot 35; ear 20.

Skull: greatest length 42; basilar length 33; zygomatic breadth 20; length of upper molar series 6; bullæ 11.

I have quoted "tail 174" from the label, but there is some mistake; I think 160 or 164 is more likely to be correct.

(23) *Tatera Phillipsi.*

Gerbillus (*Tatera*) *Phillipsi*, de Winton, Ann. & Mag. Nat. Hist. i. p. 253 (1898).

97. 12. 3. 7. Hanka Dadi, Somali (*Lort Phillips*).

I quote dimensions from Mr. de Winton's description:—

Head and body 120 mm.; tail 163; hind foot 32; ear 20.

Skull: greatest length 38·5; (basilar length 30;) greatest zygomatic breadth 20·1; length of upper molar series 6; (bullæ 11).

The small size, bright colouring, and long tail are noticeable in this form as compared with its neighbours.

(24) *Tatera mombasæ*, sp. n.

1. 5. 1. 23–24. Takangu, B. E. A. (*Percival*). Alt. 70′.

1. 5. 1 27. Kilifi, B. E. A. (*Percival*). Alt. 70′.

1. 2. 5. 6. Kitui, B. E A. (*Hinde*). Alt. 3500′.

About the same size as *shoana*, differing from that species but little in coloration. The underside of the tail, however, which in *shoana* is white, is in this species at most a pale drab or buff. The skull is slightly smaller, more finely made, and flatter than in *shoana*, with markedly smaller bullæ.

The following are dimensions:—

Head and body 130 mm.; tail 175; hind foot 36; ear 20.

Skull: greatest length 40; basilar length 31; zygomatic breadth 20; length of upper molar series 6·1; bullæ 11.

Hab. Mombasa, B. E. A.

Type. B.M. no. 1. 5. 1. 23. A young adult female. Collected by Mr. Percival on the 6th December, 1900.

Notwithstanding the difference of altitude of the localities from which they came, I can find nothing by which to distinguish the Kitui specimen from those from the coast.

Peters has described a species *leucogaster* from Mozambique. Unfortunately his description, though long and detailed, is throughout based on a comparison with "*Meriones Schlegeli*, Smith (*M. afer*, Gray)." The Museum possesses a specimen in alcohol from Peters's collection; it is labelled *leucogaster*, but it has no character in common with *leucogaster* as described, and is most likely a specimen of the form identified by Peters as *tenuis*, Smith. The type-locality of *leucogaster* is along the sea-coast from Mozambique to the Shire River.

The hind foot is given as 36–40 mm., which differentiates it at once from the Upper Shire and Nyasa forms, which have a very short hind foot; it is quite possible that *mombasæ*, which also is a coast form, may be allied to *leucogaster*, but as, in any case, it would be worthy of subspecific rank, I have not hesitated to give it a distinctive name.

(25) *Tatera gracilis.*

Gerbillus gracilis, Thos. Ann. & Mag. Nat. Hist. ix. p. 77 (1892).

85. 2. 2. 1. Gambia (*Sir C. A. Moloney*). (Type in al.)

I quote the dimensions recorded by Mr. Thomas :—

Head and body 92 mm.; tail 134; hind foot 29; ear 15·5.

Skull : greatest length 32; (basilar length 23;) zygomatic breadth 15·7; length of upper molar series 5·1; bullæ 10.

This is the smallest species of the genus known so far.

(26) *Tatera robusta.*

Meriones robustus, Cretzsch. Atlas Reis. N. Afr. (1826).
Meriones murinus, Sundevall, Vet.-Ak. Handl. (1842).

1. 5. 5. 34–39. Shendy, Nile Valley (*Rothschild*).
4. 11. 3. 59–63. Naikhala, Upper Egypt (*Rothschild*).
5. 5. 8. 24–30. Khartoum, Upper Egypt (*Butler*).
3. 2. 7. 18–20. El Kowa, Soudan (*Mrs. Anderson*).
0. 3. 3. 23. Roseires, Blue Nile (*Lord Lovat*).

Cretzschmar's description is very vague, and there is little beyond the locality to guide to an identification; this is given as "Kordofan." The type was collected by Rüppell, who, in his Catalogue of the Mammalia, gives its habitat as "Nubien"; finally, Mr. Thomas, who has seen the specimen, informs me that it is labelled "Ambukol, Nubien." Sundevall's description of *murinus*, though long and detailed, furnishes practically little on which to distinguish his species from *robusta*. He himself says :—"*A. robusto*, Rüpp., differt auriculis non acutis et rostro multo productiore sed mensuræ fere eædem videntur." The differences, it will be noted, are such that they may be due as much to the taxidermist as to natural selection. With the exception of the single specimen from Roseires all the Museum specimens are practically from the Nile banks between 13° and 17°. Unfortunately the specimens from Shendy, the nearest point to the type-locality from which we have specimens, are all young. Amongst them is one skull (1. 5. 5. 37) markedly larger in every way than the rest, and, indeed, than almost any other skull in the collection from the Nile Valley, but

externally, except in size, the specimen does not seem to differ from the rest of the series. From a most careful study of all these skulls I am of opinion that there are almost certainly two species, differing chiefly in size, but closely resembling each other, in any locality—the bulk of the Shendy specimens representing the smaller, which is probably *robusta*, and the El Kowa specimens the larger, which may be *murina*, the type-locality of which is Bahr-el-Abiad. With two doubtful types and such restricted material I have not dared to do other than lump all these specimens as *robusta*.

(27) *Tatera Emini*.

Gerbillus Emini, Thos. Ann. & Mag. Nat. Hist. ix. p. 78 (1892).

87. 12. 1. 50–51. Wadelai (*Emin Pasha*).

I quote the dimensions recorded by Mr. Thomas:—

Head and body 140 mm.; tail 155; hind foot 29.

Skull: greatest length 35; (basilar length 27;) zygomatic breadth 16; length of upper molar series 5·2; bullæ 10·4.

Noteworthy characters are small size and band of hairs across sole of hind foot, which latter is unique in the genus.

Section III.—Asia.

The colour-pattern of the tail makes this a very compact group. Unfortunately it is very badly represented in the collection. A small collection made by Mr. Woosnam quite recently, and presented to the Museum by Col. Bailward, has enabled me to recognize somewhat confidently the *tæniura* of Wagner, and thus to discriminate other Persian forms; but although we have the type of *indica*, the material from India is so very poor both in quantity and quality that, beyond identifying Waterhouse's *Cuvieri*, a strongly marked species, I have not ventured to base any conclusions on the specimens available for study.

(28) *Tatera tæniura*.

Meriones tæniurus, Wagner, Schreb. Säug., Suppl. iii. p. 471 (1842).

5. 10. 4. 28–29. Bund-i-Khel, Karun River, S.W. Persia (*Col. Bailward*). Alt. 250′.

Wagner described *Meriones tæniurus* from Syria. We have no specimens unfortunately from this locality, but experience in other genera seems to show that there is little change in the forms westward from the Euphrates until the Jordan basin is reached. Wagner's description is too vague by itself to indicate more than a large *Tatera*. He, however,

gives the following dimensions, viz.:—Head and body (measured along curves on a stuffed specimen) 8″ 9‴ (=230 mm.); tail 7″ 3‴ (=190 mm.); hind foot 1″ 8‴ (=42 mm.).

The average dimensions of the above-named two specimens are:—

Head and body 187 mm.; tail 190; hind foot 42; ear 29.

Skull: greatest length 47; basilar length 37; zygomatic breadth 26; length of upper molar series 7; bullæ 12·5.

These specimens may, I think, be confidently accepted as representing typical *tæniura*.

(29) *Tatera persica*, sp. n.

6. 1. 2. 5–6. Seistan. (Seistan Arbitration Commission.)

A large *Tatera*, as large as or even larger than either *tæniura* or *indica*.

The whole upper surface of a uniform pale sandy colour, with no apparent black grizzling, though a certain proportion of the hairs on the back are black-tipped; an area above the eyes and the cheeks paler, giving the impression of a darker band from the snout over the crown between the ears; the dark band above and below the tail showing more admixture of black than the dorsal area, the terminal black "tuft" about one fourth of the total length of the tail. The skull strong and broad, and the upper incisors very stout and broad. Unfortunately the dimensions were not recorded by the collectors, but I give the following as probably correct:—

						Skull.				
		H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
(Type)	6. 1. 2. 5. Adult	190	200	41	24	45	?	25	6·1	?
	6. 1. 2. 6. Yg. adult	190	190	40	25	45	?	25	6·3	?

Hab. Seistan.

Type. B.M. no. 6. 1. 2. 5. An adult. Collected in September 1905.

(30) *Tatera persica scansa*, subsp. n.

4. 6. 1. 3. Kerman, Persia (*Sykes*). Alt. 5700′.

Rather smaller than typical *persica*. Ground-colour much as in that species, but a very marked black grizzling on the posterior dorsal area above the root of the tail; the dark bands of the tail are also much darker than in *persica*, and the terminal "tuft" occupies about one third of tail-length. The skull is broad as in *persica*, but neither it nor the molars are so stout. The emargination of the anterior border of

the infraorbital plate, which in *persica* is represented by at most a shallow arc, is in this specimen so deep that the emargination becomes distinctly "C"-shaped. That this character is constant I am not, however, in a position to affirm.

The following are the dimensions :—

Head and body 180 mm. : tail 193 ; hind foot 39 ; ear 26.

Skull : greatest length 45 ; basilar length 35 ; zygomatic breadth 25 ; upper molar series 6 ; bullæ 12·5.

Hab. Kerman, Persia.

Type. B.M. no. 4. 6. 1. 3. An adult male. Collected by Mr. Sykes on the 1st February, 1903, and presented to the Museum.

(31) *Tatera indica.*

Dipus indicus, Hardw. Linn. Trans. viii. p. 279 (1807).

11. *g.* "India." (Type.)

Hardwicke describes the colour as "bright bay mixed with pencil-like strokes of dark brown longitudinally disposed," and gives the size as :—Head and body 6 5″ ; tail 7″, tuft for last 2″ dark brown. I put the normal dimensions as follows :—

Head and body 180 mm. ; tail 190 ; hind foot 38.

Skull : greatest length 46 ; zygomatic breadth 23 ; length of upper molar series 5·5.

The skull is much broken, but suffices to show that it is more delicately made and long and narrow as compared with those of the Central Asian forms ; the upper molars, however, are fairly stout for their size.

(32) *Tatera Cuvieri.*

Gerbillus Cuvieri, Waterh. P. Z. S. p. 56 (1838).

99. 12. 21–2. Moli Jeri, Tinniveli (*Barber*).

5. 11. 25. 2. Ramnad, Madura (*Annandale*).

These specimens I refer quite confidently to *Cuvieri*, Waterhouse. They closely agree with his description both in colour and proportions. The following may therefore be taken as normal dimensions for this species :—

Head and body 165 ; tail 200 ; hind foot 45 ; ear 22.

Skull : greatest length 44 ; basilar length 34 ; zygomatic breadth 23 ; length of upper molar series 6 ; bullæ 12.

The extraordinary length of the hind foot, considering the size of the animal, was relied on by Waterhouse to distinguish this species from *indica*, and to this may be added the

proportionally very long tail. The upper molars are fairly stout, but the incisors are much narrower than in any Asian form that I have seen except *ceylonica*.

(33) *Tatera Bailwardi*, sp. n.

5.10.4.30. Bund-i-Khel, Karun River, S.W. Persia (*Col. Bailward*). Alt. 250′.

5.10.4.31. Shus, near Dizful, S.W. Persia (*Col. Bailward*). Alt. 500′.

5.10.4.32. Ram Hormaz, near Awaz, S.W. Persia (*Col. Bailward*). Alt. 500′.

53.1.6.83. Mound of Susa, Khuzistan, S.W. Persia (*Loftus*).

50.10.21.5. Euphrates Expedition.

This species differs from *tæniura* in hardly anything but size; in detail of colouring I can detect but the very smallest differences; the white patches on the face are rather more marked in this species, forming an indistinct but continuous line of pale colouring from the sides of the muzzle, over the eyes, to the base of the ears. Its consistently smaller size in all details, however, and the fact that the type specimen was taken at the same time and place as the specimens which I have identified as *tæniura*, from which it is clearly distinct, has determined me to give it a specific name.

The following are some measurements :—

							Skull.				
			H. & b.	Tl.	H. f.	Ear.	G. l.	B. l.	Zyg. b.	Mol.	Bullæ.
(Type)	5.10.4.30. ♂.	Adult ..	166	182	41	28	44	34	23	6·5	11·5
	5.10.4.31. ♀.	Old	161	176	41	28	44	34	23	6·5	11·5
	5.10.4.32. ♂.	Adult ..	166	167	40	28	45	35	23	6·5	11·5

Hab. Bund-i-Khel, S.W. Persia.

Type. B.M. no. 5.10.4.30. An adult male. Collected by Mr. Woosnam on the 6th March, 1905, and presented to the Museum by Col. Bailward.

(34) *Tatera Bailwardi monticola*, subsp. n.

5.10.4.33. Mala Mir, S.W. Persia (*Col. Bailward*). Alt. 3300′.

The same size as *Bailwardi*, of which it is apparently a high-level form. Ground-colour much less rufous than in that species, giving it a soberer general coloration. The skull very broad and much stouter and the bullæ markedly larger. The following are the dimensions :—

Head and body 164 mm.; tail 177; hind foot 39; ear 28.

Skull: greatest length 46; basilar length 35; zygomatic breadth 25; length of upper molar series 6·5; bullæ 12·5.

Hab. Mala Mir, S.W. Persia.

Type. B.M. no. 5. 10. 4. 33. An old female. Collected by Mr. Woosnam on the 12th April, 1905, and presented to the Museum by Col. Bailward.

(35) *Tatera ceylonica*, sp. n.

52. 5. 9. 31. ♂. Ceylon (*Kelaart*).

In coloration *ceylonica* differs but little or not at all from *Cuvieri*—*i. e.*, from the specimens which I have identified as that species. It is dark cinnamon-brown along the centre of the back (probably due to the black tips of the hairs in that area), pallid along the sides. Above the eyes, and behind them to the ears and the cheeks, dull white. The following are dimensions:—

Head and body 160 mm.; tail 150; hind foot 41; ear 20.

Skull: greatest length 44; basilar length 33; zygomatic breadth 22; length of upper molar series 6; bullæ 11.

Hab. Ceylon.

Type. B.M. no. 52. 5. 9. 31. An adult male. Presented to the Museum by Dr. Kelaart.

Notwithstanding its colour-resemblance it is easily distinguishable from *Cuvieri* by its extremely short tail and much shorter hind feet. The skull is about as in *Cuvieri*, but the upper molars are finer and narrower than in that or any other Asiatic form.

LXV.—*A new Genus of Free-tail Bat from N.E. Africa.* By Oldfield Thomas.

Platymops, gen. nov. (*Molossidæ*).

Ears widely separated, as in *Mormopterus*. Lips without wrinkles, covered with short stout bristles. Forearms shagreened. Wings short. Metacarpal of third finger only one third longer than that of fifth; first phalanx of fifth finger much shortened, one third the length of the metacarpal and not longer than the second phalanx. A small untufted gular sac present in both sexes.

Skull of the general outline in upper view of that of *Mormopterus*, but extraordinarily flattened vertically. Crests much reduced, the sagittal absent and the lambdoid not